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APPLICANT: Colin CHAMBERS et al.   ) Group Art Unit:
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TITLE: A CELLULAR MINIGRID

AMENDED CLAIMS

1.   (original) A system for transferring a resource within an area having a plurality of regions the system comprising:

    determining means operable to determine whether any one or more of the regions requires an amount of the resource;

    requesting means operable to issue a request to at least one of the regions for the amount of the resource; and

    transferring means operable to transfer the resource from the at least one of the regions to the any one or more of the regions.

2.   (original) The system as claimed in claim 1, wherein the determining means is operable to determine whether any one or more of the regions requires the amount of the resource by determining whether a supply of the resource is adequate for any one or more of the regions.

3.   (currently amended) The system as claimed in claim 1 [[or 2]], wherein the determining means is operable to determine whether any one or more of the regions requires the amount of the resource by determining whether a source from which the supply of the resource is obtained is operational.

4.   (original) The system as claimed in claim 2, wherein the determining means is operable to determine whether the supply of the resource is adequate by determining whether a demand for the resource is likely to exceed a maximum amount which the supply of the resource can provide.

5.   (original) The system as claimed in claim 3, wherein the determining means is operable to determining whether the source is operational by monitoring a status of the source.

6.   (original) The system as claimed in claim 4, wherein the determining means determines whether the demand exceeds the maximum amount by monitoring an output of the source.

7.   (original) The system as claimed in claim 6, wherein the determining means comprises an electronic monitoring device which is capable of collecting information about the status and the output of the source, the monitoring device being capable of processing the information in order to determine whether the demand exceeds the maximum amount and the status of the source.

8.   (currently amended) The system as claimed in ~~any one of the preceding claims~~ claim 7, wherein the requesting means comprises a plurality of interconnected devices each of which is associated with a respective one of the regions, each of the devices being capable of issuing the request to any other devices which are connected thereto, thereby effecting issue of the request to the at least one of the regions.

9.   (original) The system as claimed in claim 8, wherein each of the devices is such that upon receiving the request they determine whether the respective one of the regions is capable of providing the amount of the resource.

10.   (currently amended) The system as claimed in claim 8 [[or 9]], wherein each of the devices is capable of issuing an indication that the respective one of the regions is capable of providing the amount of the resource.

11.   (currently amended) The system as claimed in ~~any one of claims 8 to 10~~ claim 10, wherein each of the devices is capable of determining whether the respective one of the regions has a surplus amount of the resource, to thereby effect determining of whether the respective one of the regions is capable of providing the amount of the resource.

12.   (original) The system as claimed in claim 11, wherein each of the devices is capable of determining whether a demand for the resource in the respective one of the regions is likely to exceed a maximum amount which the supply of the resource can provide to the respective one of the regions, to thereby effect determination of whether the respective one of the regions has the surplus amount of the resource.

13.   (currently amended) The system as claimed in ~~any one of the preceding claims~~ claim 12, wherein the transferring means comprises a plurality of links which are arranged in a mesh topology, and which can be used to transfer the resource from the at least one of the regions to the any one or more of the regions.

14.   (original) A method for transferring a resource within an area having a plurality of regions, the method comprising the steps:
        determining whether any one or more of the regions requires an amount of the resource;
        issuing a request to at least one of the regions for the amount of the resource; and
        transferring the resource from the at least one of the regions to the any one or more of the regions any one or more of the regions to the first of the regions.

15.   (original) The method as claimed in claim 14, wherein determining whether the any one or more of the regions requires the amount of the resource comprises determining whether a supply of the resource is adequate for the any one or more of the regions.

16.   (currently amended) The method as claimed in ~~claims 14 or 15~~ claim 15, wherein determining whether the any one or more of the regions requires the amount of the resource comprises determining whether a source from which the supply of the resource is obtained is operational.

17.   (original) The method as claimed in claim 15, wherein determining whether the supply of the resource is adequate comprises determining whether a demand for

the resource is likely to exceed a maximum amount which the supply of the resource can provide.

18.   (original) The method as claimed in claim 16, wherein determining whether the source is operational comprises monitoring a status of the source.

19.   (original) The method as claimed in claim 17, wherein determining whether the demand exceeds the maximum amount comprises monitoring an output of the source.

20.   (original) The method as claimed in claim 19, wherein determining whether the source is operational and/or whether the demand exceeds the maximum amount comprises collecting information about the status and the output of the source, and processing the information in order to determine whether the demand exceeds the maximum amount and the status of the source.

21.   (currently amended) The method as claimed in ~~any one of claims 14 to 20~~ claim 14, wherein issuing the request comprises determining whether the respective one of the regions is capable of providing the amount of the resource.

22.   (currently amended) The method as claimed in ~~any one of claims 14 to 21~~ claim 14, wherein issuing the request comprises issuing an indication that the respective one of the regions is capable of providing the amount of the resource.

23.   (currently amended) The method as claimed in ~~any one of claims 14 to 22~~ claim 14, wherein transferring the resource comprises arranging a plurality of links into a mesh topology, and using the links to transfer the resource from the at least one of the regions to the any one or more of the regions.

24.   (original) A decentralised resource network, the network comprising:
        a plurality of geographically dispersed sub- networks each of which comprises a generator capable of generating a resource and a local distribution system arranged to distribute the resource to users;

a generator control system operable to: identify a first of the sub-networks that that is not capable of providing an amount of the resource required by the users ; and change an operational status of the generator of a second of the sub-networks so as to produce the amount of the resource; and

a backbone distribution system arranged to transfer the amount of the resource from the first of the sub-networks to the second of the sub-networks.

25. (original) The decentralised resource network as claimed in claim 24, wherein the generator control system is operable to select the second of the sub-networks based on a proximity of the second of the sub-networks to the first of the sub-networks.

26. (currently amended) The decentralised resource network as claimed in claim 24 [[or 25]], wherein the generator control system comprises:

a local control system;

a communication means; and

a global controller, wherein the local control system is operable to collect status information about a status of the generator in each of the sub-networks and use the communication means to transfer the information to the global controller, the global controller being operable to process the status information in order to identify the first of the sub- networks and send status control data to the local control system via the communication means, the local control system being operable to process the status control data in order to effect the change in the operational status of the generator in the second of the sub-networks.

27. (currently amended) The decentralised resource network as claimed in ~~any one of claims 24 to 26~~ claim 24, wherein the backbone distribution system comprises a plurality of resource transmission links arranged in a mesh topology.

28. (original) Computer software which, when executed by a computing system, allows the computing system to carry out the method as claimed in any one of claims 14 to 23.

29.   (original) A computer readable medium comprising the software as claimed in claim 28.